L 18567-66 EWT(m)/EWP(j)/T WW/JW/JWD/RM

ACC NR: AP6002700 SOURCE CODE: UR/0062/65/000/012/2190/2193

AUTHORS: Zakharkin, L. I.; Kazantsev, A. V.

61
B

ORG: Institute for Heterorganic Compounds, Academy of Sciences, SSSR (Institut elementoorganicheskikh soyedineniy Akademii nauk SSSR)

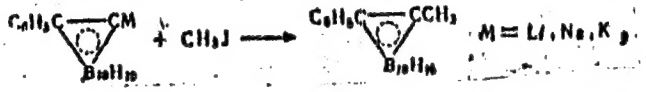
7,14,55

TITLE: Investigation of the alkylation reaction of C-metallic borane derivatives

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 12, 1965, 2190-2193

TOPIC TAGS: borane, boron compound, organoboron compound, alkylation, lithium, sodium, boron

ABSTRACT: A detailed investigation of the alkylation of lithium and sodium borane derivatives by different alkyl halides was carried out. This study is an extension of work previously published by L. I. Zakharkin (Izv. AN SSSR, Ser. khim. 1965, 158). The effect of different solvents and alkali metals on the alkylation reaction was studied on the system



Card 1/2 UDC: 542.91+661.718

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ACC NR: AP6002700

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and the reaction yields as a function of the solvent and the nature of alkali metal were determined. Melting points of the synthesized compounds are tabulated. It is concluded that the alkylation proceeds more smoothly in liquid ammonia than in ether-benzene solution. Orig. art. has: 3 tables and 3 equations.

SUB CODE: 07/ SUBM DATE: 02Apr65/ ORIG REF: 003/ OTH REF: 003

Card 2/2 Sm

06265
SOV/107-59-6-29/50

9(2)

AUTHOR: Kazantsev, B.

TITLE: Automatic Traffic Lights

PERIODICAL: Radio, 1959, Nr 6, pp 24-26 (USSR)

ABSTRACT: The author describes the electronic automatic traffic light control device L-2. The principal circuit diagram is shown in Figure 2. The device consists of five time relays. Four of them are built with two 6N8S tubes and control the duration of the different traffic light phases. The contact units of all four RKN relays are connected in such a way that they work consecutively. Further, a 6P6S tube is used, but its function is not explained. MKU-48 direct current relays are used. A bridge rectifier with DGTs-25 germanium diodes supplies direct current. The device is built to function in connection with other traffic lights which are controlled by the same type of equipment. It is built of widely

Card 1/2

Automatic Traffic Lights

used parts produced by the Soviet industry. The unit is enclosed in a metal housing of 300 x 260 x 180 mm. In case of a failure, the entire unit may be replaced within 3 minutes. The connection between two or more automatic traffic light control devices is achieved by a telephone line, which may consist of two steel wires. If the connection of the different phases, red, yellow, green, is disturbed, they will continue their operation as individual controls. There are 2 circuit diagrams, 1 block diagram, 2 sketches.

VELIK NOV, N. (Chelyabinsk); ZEMTSOV, A.; KAZANTSEV, B. (Leningrad)

Electronic signal light switches. Radio no.4:50-51 Ap '64.
(MIRA 17:9)

AID P - 3333

Subject : USSR/Power Engineering

Card 1/1 Pub. 26 - 19/28

Authors : Butyrin, Ya. N., Eng. and B. A. Kazantsev, Senior Techn.

Title : Tenon joining of waterwalls in the boiler furnace

Periodical : Elek. sta., 26/8, 48-49, Ag 1955

Abstract : The article describes the manner in which the welding of tenons in a 110t/hour, 42 atm boiler, operating on anthracite culm was made without cutting out the waterwalls. The operation is described in great detail with 3 diagrams.

Institution : None

Submitted : No date

L [illegible] SOURCE CODE: UR/0143/65/[illegible]/0079/0086

ACC NR: AF6013613

AUTHOR: Kazantsev, B. E. (Engineer)

ORG: Leningrad Polytechnic Institute im. M. I. Kalinin (Leningradskiy politekhnicheskiy institut)

TITLE: Graphic method of calculating tidal-wave regulation with taking into account of the pipe effect

SOURCE: Izvestiya vysshikh uchebnykh zavedeniy. Energetika, no. 6, 1965, 79-86

TOPIC TAGS: ocean tide, hydroelectric power plant, turbine, pump, flow rate

ABSTRACT: A basic requirement that must be met by the hydroelectric equipment of tidal power stations is its ability to operate both in turbine and pump regimes. In this connection, power generation at tidal power stations can be increased by utilizing the pump effect. The nature of this effect is as follows: during the period when the difference between the water levels of the station's basin and the sea is small, an additional amount of water is pumped from the sea into the basin so that it may be utilized in the subsequent turbine work in the basin in the presence of a much higher pressure. If the characteristics of the equipment of the tidal power station and electric transmission lines, as well as other data, are known, then the optimal combi-

UDC: 627.160

Card 1/2

L 39513-66
ACC NR: AP6013613

nation of the pump and turbine regimes can be calculated in advance as a function of the tidal amplitude and the specific daily load graph. Since, however, exact calculations are not possible in the planning stage, the author describes an approximate graphic method for calculating the extent to which the tidal wave must be regulated on taking into account the pump effect, as based on the following assumptions: the flow rate of water through the station's equipment is constant regardless of the regime (turbine, pump, idling); the efficiency of pumps and turbines is constant; two adjacent tidal waves are of the same amplitude; on this basis it can be proceeded from the premise that two consecutive periods of operation of the tidal power station (emptying and filling of the basin) are symmetric with respect to the wave height. The corresponding curves are plotted and formulas derived. Orig. art. has: 2 figures, 2 formulas, and 1 table. [JPRS]

SUB CODE: 10 / SUBM DATE: 30Jul64 / ORIG REF: 002

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ACC NR: AR6035268

through the turbines remains constant and is the same in both regimes; 5) the idle discharge is constant; 6) similar amplitude for adjacent tidal waves; 7) the two duodirectional periods of operation of the tidal hydroelectric power plant are linked symmetrically according to wave height. Comparative calculations made of the author's method and that of Bernstein have shown both methods to give roughly the same results. B. Kagan. [Translation of abstract] [GC]

SUB CODE: 10, 20/

Card 2/2

KAZANTSEV, B.E., inzh.

Graphical method for calculating tidal wave control with consideration of the pumping effect. Izv. vys. ucheb. zav.; energ. 8 no.6:79-86 Je '65. (MIRA 18:7)

1. Leningradskiy politekhnicheskiy institut imeni Kalinina. Predstavlena kafedroy ispol'zovaniya vodnoy energii.

KAZANTSEV, B. I. Cand Tech Sci -- (diss) "Regression of the centers of hidden photographic images." Mos, 1958. 7 pp (Min of Culture USSR. All-Union Sci Res Cinema-Photo Inst NIKFI), 150 copies (KL, 49-59, 140)

Kazantsev, B. I.

771.535

7591. Regression of the latent-image centres. B. I. KAZANTSEV AND P. V. MELKLYAR. *Zh. éksper. teor. fiz.*, **28**, No. 1, 70-6 (1955) In Russian.

Photographic plates were subjected to a 100-sec exposure, either at a stretch or in two instalments with an intervening interval of darkness; after development, the blackening was determined sensitometrically. It was found that the obtained results of the regression (fading) of both the latent-image centres (in thick-emulsion plates) and subcentres (in ordinary plates) do not tally with either of the two theories so far suggested, i.e. the oxidation theory and that involving the recombination of Ag atoms with Br. It was also found that Melklyar's [Abstr. 8739 (1951)] equation $\Delta\sigma/\Delta\sigma_0 = 1/(1 + \alpha t)^2$ for the decay of photoconductivity in Ag halide crystals, when transformed into $N/N_0 = 1/(1 + N_0 k\tau)^2$, where N and N_0 are the numbers of Ag atoms in a centre at the end and beginning of the time interval τ, respectively, and k and α are constants (varying from ~0·2 to ~0·5 in either equation), represents very accurately the sensitometric curves obtained.

F. LACHMAN.

62

Molotov State Pedagog. Inst.

(1)

Kazantsev, B.I.

USSR/Optics - Photography K-11

Abs Jour : Referat Zhur - Fizika, No 5, 1957, 13223

Author : Kazantsev, B.I.
Inst : -
Title : Connection Between the Regression of the Centers of the Latent Photographic Image and the Deviations from the Law of Replaceability.

Orig Pub : Zh. nauch. i prokl. fotogr- i kinematogr., 1956, 1, No 3, 164-169

Abstract : Several commercial grades of photographic materials were used to study the effective temperature of the $NaNO_2$ (I), borax (II), potassium bromide (III), vacuum, and vapors of water on the regression (R) of the latent image and on the deviations from the law of interchangeability at low illumination intensities. Reducing the temperature and treating the plates with solutions of I and II slows down the regression and reduces the deviation from the

Card 1/3

Molotov State Pedagogical Inst.

USSR/Optics - Photography

K-11

Abs Jour : Ref Zhur - Fizika, No 5, 1957, 13223

interchangeability, while a solution of III accelerates the regression rapidly and increases the deviation from the interchangeability. Slowing the photographic material in vacuum slows down the regression, and exposure in vacuum reduces the deviation from the interchangeability. Thus, all the above factors effect both R and the deviation from interchangeability in a similar manner. An exception is only water vapors, which accelerate the regression and reduce the deviation from the interchangeability. Water vapors slow down the regression at the early stages of formation of the latent image and accelerate it at later stages. It is concluded that there exists a parallelism between the regression of the center of the latent image in the case when the action of the light is interrupted at the initial stage of their formation, and the deviations from the interchangeability upon prolonged illumination durations. In the author's opinion, the result

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USSR/Optics - Photography

K-11

Abs Jour : Ref Zhur - Fizika, No 5, 1957, 13223

obtained is due to the similarity between the mechanisms of the two phenomena, based on the thermal diffusion of the centers of the latent image.

Card 3/3

AUTHORS: Kazantsev, B.I., Meyklyar, P.V. SOV/77-3-6-1/15

TITLE: The Kinetics of the Regression of the Centers of the Latent Photographic Image (Kinetika regressii tsentrov skrytogo fotograficheskogo izobrazheniya)

PERIODICAL: Zhurnal nauchnoy i prikladnoy fotografii i kinematografii, 1958, Vol 3, Nr 6, pp 401-406 (USSR)

ABSTRACT: The authors describe investigations into the kinetics of the regression of the centers of the latent image. These experiments are considered important to a better understanding of the formation of the latent image. The photographic layer underwent a determined exposition. An incandescent lamp that obtained its energy through a ferroresonant stabilizer was used as the source of light. The duration of illumination was 100 seconds. A sensitometric wedge-shaped transparent glass plate with a constant 0.15 for white light and 0.17 for blue light was fixed before the layer. Chibisov developer was used. An evenly developing temperature, with up to 0.5° accuracy, was provided by thermostats. The obtained sensitograms were measured out on a photoelectric densitometer. From these sensitograms characteristic curves (graphs 1 to 11) were developed. Uniform development was provided for all

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frames of one pack until the image became visible. Regression of the image was brought about by keeping the frames under normal conditions, conditions with and without oxygen in a moist medium, and conditions of irradiation with red light. The processes were compared. It is concluded that each process starts with a liberation of electrons: photoelectric in the case of irradiation with red light, thermic in the case of regression. This is followed by a process of thermic elimination of the silver ions. The presence of oxygen influences this process only with respect to its influence on the relaxation of the photoelectric processes. Regression speed in a moist medium with reduced oxygen content differs slightly from that in a medium with normal oxygen contents (Graph 12).

Card 2/3

KAZANTSEV, B. N.

"Litia Aqueous Net (Hydrodictyon reticulatum Lagerheim) as a Plant which is Harmfu to Gambusia [a germ of fish effective in destroying Mosquito larvae]", Med. Paraz. i Paraz. Bolez., Vol. 17, No. 4, pp 370-73, 1948.

KAZANTSEV, B. N.

Kazantsev, B. N. "Parasites on 'gambuziya rachka' of the genus 'Lerney' in the natural reservoirs of Central Asia", Soobshch. Tadzh. filiala Akad. nauk SSSR, Issue 14, 1949, p. 14-19.

SO: U-4630, 16 Sept. 53, (Letopis 'Zhurnal 'nykh Statey, No. 23, 1949).

KAZANTSEV, B. N.

36641. Materialy Po Faune Krovososushchikh Komarov Yavanskogo Rayona. Socbshch. Tadzh. Filiala Akad. Nauk SSSR, Vyp. 18, 1949, c. 19-21

SO: Letopis' Zhurnal'nykh Statey, Vol. 50, Moskva, 1949

MEYER, L.K.; KAZANTSEV, B.N.

A conference in the Tadjik Republic on the control of malaria and helminthiasis. Med.paraz.i paraz.bol. no.3:285-286 My-Je '53. (MLRA 6:8)
(Malarial fever--Prevention) (Worms, Intestinal and parasitic)

KAZANTSEV, B.N.

Material on the distribution and ecology of the leech Limnatis nilotica in Tajikistan. Izv. Otd. est. nauk AN Tadzh.SSR 18:195-203. '57. (MIRA 11:8)

1. Stalinabadskiy institut epidemiologii i gigiyeny Ministerstva zdravookhraneniya Tadzhikskoy SSR.
(Tajikistan--Leeches)

KAZANTSEV, B.N.

Gambusias as predatory fishes in connection with the development of fisheries in the Kayrak-Kum Reservoir. Dokl. AN Tadzh. SSR no. 20:59-62 '57. (MIRA 11:7)

1. Stalinabadskiy institut epidemiologii i gigiyeny Ministerstva zdravookhraneniya Tadzhikskoy SSR.
(Kayrak-Kum Reservoir--Gambusia)

KAZANTSEV, B.N.

Observations on the ecology of Anopheles superpictus in the hill zone of central Tajikistan. Sbor. rab. po mal. i gel'min. no.2:125-138 '59. (MIRA 15:3)

(TAJIKISTAN--MOSQUITOES)

KAZANTSEV, B.N.

Anophelogenic significance of the shallow waters in the Kara Kum Reservoir. Sbor. rab. po mal. i gel'min. no.2:151-161 '59. (MIRA 15:3)

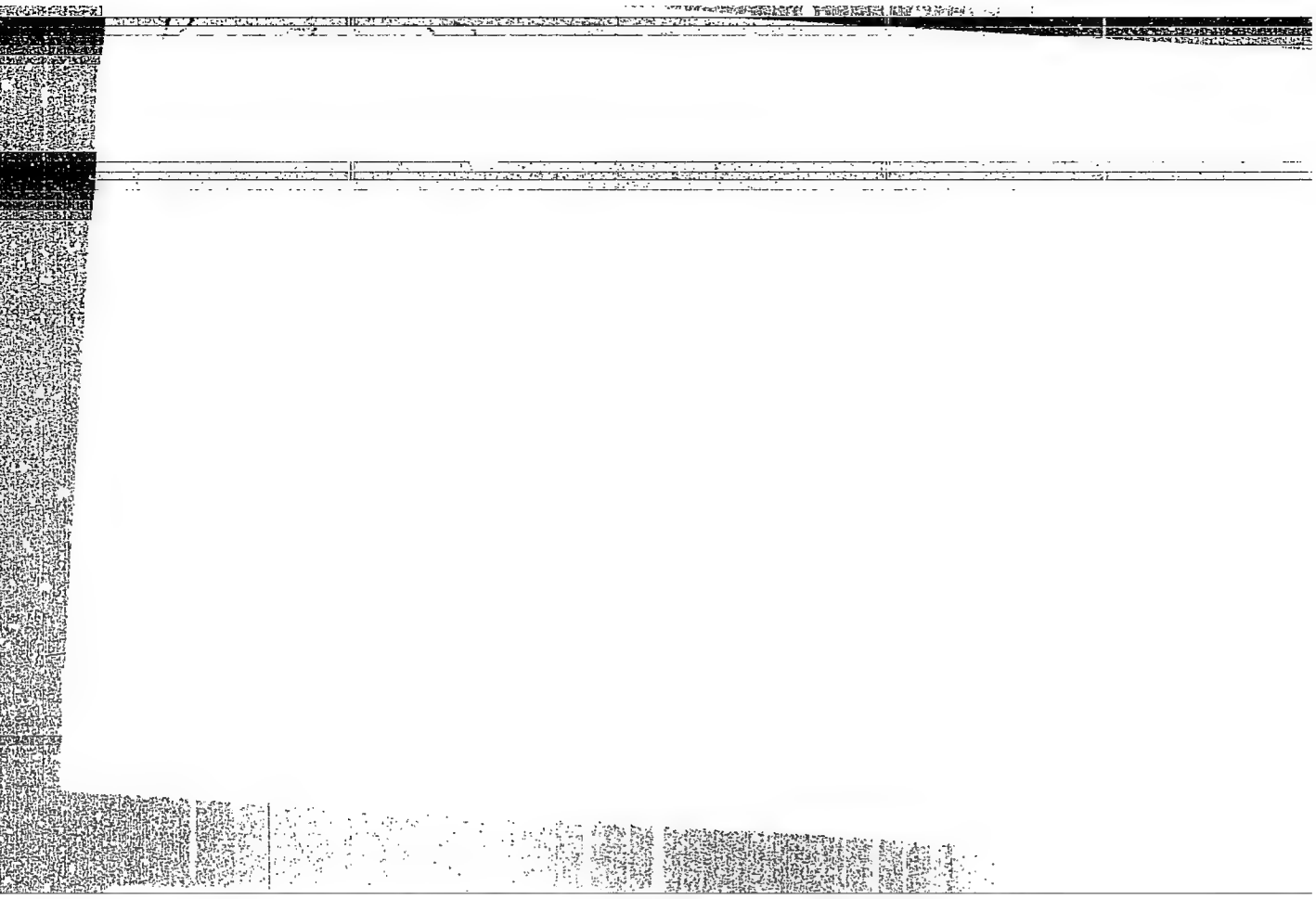
(KARA KUM RESERVOIR--MOSQUITOES)

KAZANTSEV, B.N.

Data on the acclimatization of gambusia in the Tajik S.S.R.
Sbor. rab. po mal. i gel'min. no.2:175-185 '59. (MIRA 15:3)
(TAJIKISTAN--MOSQUITOES--EXTERMINATION)
(GAMBUSIA)

KAZANTSEV, B.N.; MAMKEYEVA, Kh.I.

Prophylactic measures against the appearance of outbreaks of tick-borne spirochetosis in new building projects. Zdrav. Tadzh. 8 no.5:21-24 S-O '61. (MIRA 15:1)
(SPIROCHETOSIS) (TICKS AS CARRIERS OF DISEASE)



KAZANTSEV, B. P. (reviewer)

"Review of V. A. Uryvayev's Book Eksperimental'nyye gidrologicheskiye issledovaniya na Valdaye," Meteorology i gidrologiya, No 1, 1954, pp 53-55

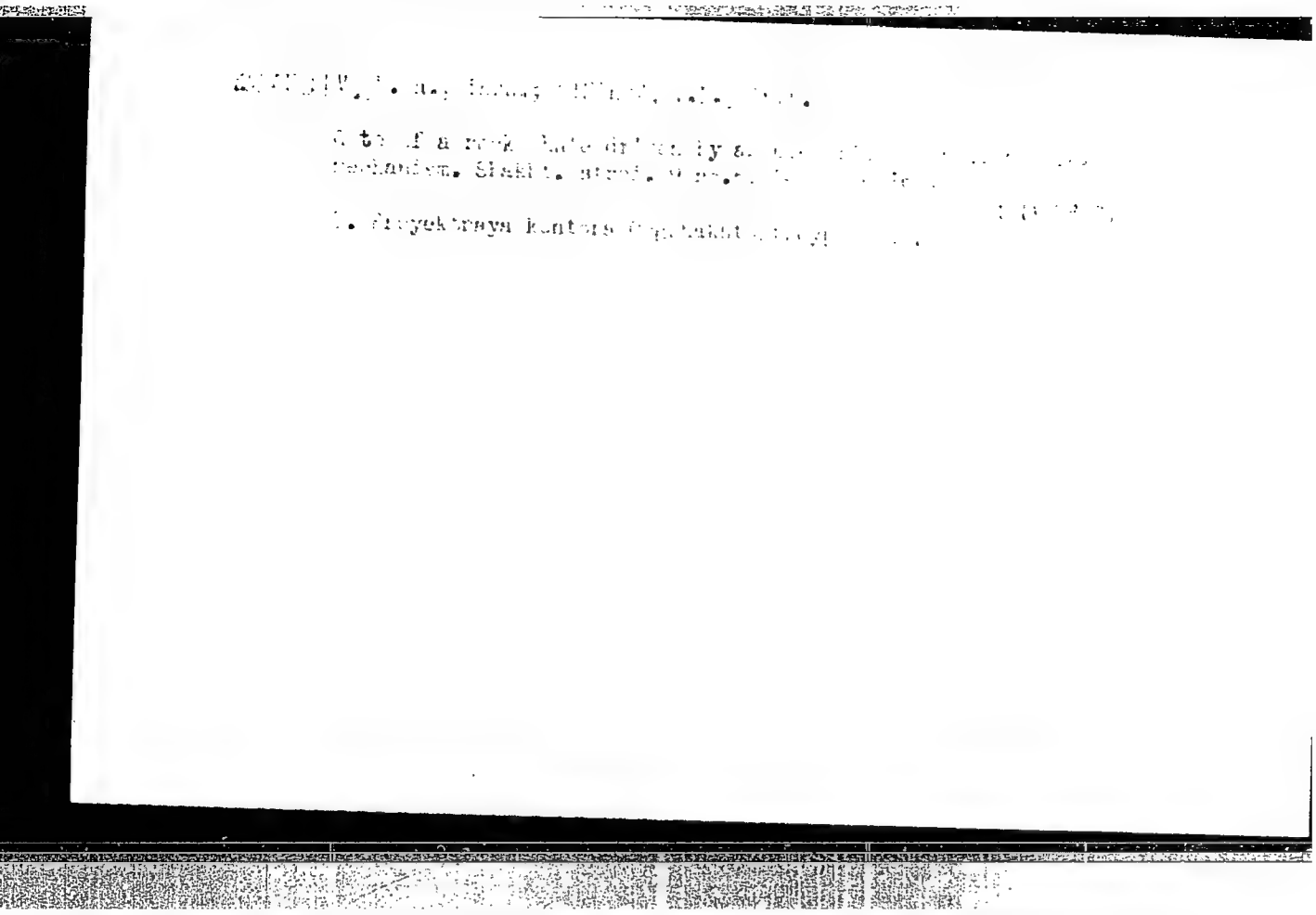
Review of the 232-page Eksperimental'nyye gidrologicheskiye issledovaniya na Valdaye (Experimental Hydrological Developments in Valday), Hydrometeorological Press (Gidrometeoizdat), Leningrad, 1953. (RZhGeol, No 5, 1954)

SO: Sum. No. 568, 6 Jul 55

KOREPANOV, A.; BERDNIKOV, V.V.; KADOSHNIKOV, B.A.; KAZANTSEV, D.P., red.; VORONTSOVA, Z.Z., tekhn. red.

[Our experience in fattening young cattle] Nash opyt nagula molodnyaka krupnogo rogatogo skota. Izhevsk, Udmurtskoe knizhnoe izdvo, 1960. 16 p. (MIRA 14:12)

1. Zaveduyushchiy Molochno-tovarnoy fermy kolkhoza "Rassvet" Igrinskogo rayona (for Korepanov).
(Cattle--Fepding and feeds)



Kazantsev, E. I.

62
(1)

The regression of the centers of the latent photographic image. E. I. Kazantsev and P. V. Meiklyar. ... (1953). -- Photographic plates were exposed altogether 100 sec. ... either in one exposure ... exposures ...

... regression ... which ... the ... of photographic ... and the attenuation of the ... crystals ...

TAGEYEVA, S.V.; KAZANTSEV, E.N.

Characteristics of cytoplasmic and chloplastic streaming in the leaf cells of Elodea canadensis. Izv.AN SSSR.Ser.biol. no.6:885-895 N-D '62. (MIRA 16:1)

1. Institute of Biological Physics, Academy of Sciences of U.S.S.R.

(PLANT CELLS AND TISSUES) (WATERWEED)

PAGEYEVA, S.V.; KAZANTSEV, E.N.; TAIRBEKOV, M.G.; KORSHUNOVA, V.S.

Elements of the mechanism of motility of cytoplasmic structures in plant cells. Fiziol. rast. 12 no.5:854-865 S-O '65.

(MIRA 19:1)

1. Institut biofiziki AN SSSR, Moskva.

TAIRBEKOV, M.G.; KAZANTSEV, E.N.; TAGEYEVA, S.V.

Relation between the synthesis and decomposition of ATP and the intensity of cytoplasm motion in a plant cell. Biokhimiia 30 no.6:1285-1291 N-D '65.

(MIRA 19:1)

1. Gruppa biofiziki rastitel'noy kletki Instituta biologicheskoy fiziki AN SSSR, Moskva. Submitted March 15, 1965.

TAGEYEVA, S.V.; KAZANTSEV, E.N.

Movement of cytoplasm and chloroplasts in the cells of detached leaves of Elodea canadensis. Fiziol. rast. 9 no.5:542-549 '62. (MIRA 15:10)

1. Institut of Biological Physics, U.S.S.R. Academy of Sciences, Moscow.

(Chromatophores) (Protoplasm)

KAZANTSEV, E.N.; AFANAS'YEV, L.F.

Use of electromechanical apparatus for studies of cytoplasmic mobility. TSitologiia 7 no.2:270-272 Mr-Ap '65. (MIRA 18:7)

1. Laboratoriya fotobiologii Instituta biologicheskoy fiziki AN SSSR, Moskva.

KAZANTSEV, E. N.; TAGEYEVA, S. V.; TAIRBEKOV, M. G.

"The mechanism of movement of cytoplasmic structures in plant cells."

report submitted for 10th Intl Botanical Cong, Edinburgh, Scotland, 3-12 Aug 64.

KAVANTSEV, E.N.

Variation of the velocity of movement of cytoplasm and chloroplasts in the Elodea cells throughout the year. Fiziol. rast. 11 no.4:587-593 Jl-Ag '64. (MIRA 17:11)

1. Institute of Biological Physics, U.S.S.R. Academy of Sciences, Moscow.

KAZANTSEV, F.; PELEVINA, N., konduktor; BAYKOV, R., slesar' depo

If the party says it must be done, Communist Youth League answers, aye! Zhil.-kom. khoz. 12 no.4:4-5 Ap '62. (MIRA 15:7)

1. Sekretar' partiynogo byuro Upravleniya noginskogo tramvaya (for Kazantsev). 2. Chlen komiteta Vsesoyuznogo Leninskogo kommunisticheskogo soyuza molodezhi (for Baykov).
(Communist Youth League)
(Noginsk--Streetcars)

LAZARTSEV, F. K.

LAZARTSEV, F. K. "The reaction of cattle to minor gustatory irritations," Doklady (Mosk. s.-kh. akad. im. Timiryazeva), Issue 8, 1949, p. 125-27

SO: U-5240, 17, Dec. 53, (Letopis 'Zhurnal Statey, No. 25, 1949).

KAZANTSEV, F. M.

Fattening swine for meat and lard Moskva, Gos. izd-vo selkhoz lit-ry, 1955. 44p.

KAZANTSEV, F. M.

USSR/Farm Animals. Small Horned Cattle

Q-3

Abs Jour : Ref Zhur - Biol., No 11, 1958, No 49996

Author : Kazantsev F.M.
Inst : Moscow Academy of Agriculture imeni K.A. Timiryazev
Title : Changes of Some Clinical and Physiological Indicators in Cows Caused by Variegated Feeding Schedules.

Orig Pub : Dokl. Mosk. s.-kh. akad. im. K.A. Timiryazeva, 1957, vyp. 27, 219-223

Abstract : The work schedule in the cow barn, characteristics and techniques of feedings produce a physiological stereotype of the well-being and behavior of the cows which may be disclosed by the complex of clinical and physiological indicators. The transition from the two-cycle feeding and milking schedule to a four-cycle one has been sharply reflected in the indices of nutritional equilibrium. According to the author's findings, the milk yield in one of the cows decreased by 14 percent, in another cow by 8 percent, and in a third cow by 7 percent because of such transition. The cows' becoming accustomed

Card : 1/2

KAZANTSEV, F.M., kand.sel'skokhozyaystvennykh nauk, dotsent

Scientific and pedagogic activities of academician. Izv.TSKhA no.2:119-122 '59. (MIRA 12:7)
(Popov, Ivan Semenovich)

POLYAKOV, I.I., prof., doktor biol. nauk; BARANOVA, K.V., dots.,kand sel'khoz. nauk; KAZANTSEV, F.M., dots., kand. sel'khoz. nauk; ORLOV, A.V., dots., kand. sel'khoz. nauk; BABKINA, N.G., red.

[Practical course in animal husbandry] Praktikum po zhivotnovodstvu. Moskva, Kolos, 1965. 222 p. (MIRA 18:7)

GOLOGORSKIY, V.A.; KAZANTSEV, F.N.

Problem of causes and treatment of hypotension during anesthesia and surgery. Khirurgiia 37 no.4:52-62 '61. (MIRA 14:4)

1. Iz kafedry obshchey khirurgii (zav. - prof. G.P. Zaytsev) pediatricheskogo fakul'teta II Moskovskogo gosudarstvennogo meditsinskogo instituta imeni N.I. Pirogova.
(ANESTHESIA) (SURGERY, OPERATIVE) (HYPOTENSION)

KAZANTSEV, F.N. (Moskva)

Some data on changes in the sympathoadrenal system in vascular diseases. Klin.med. 39 no.1:64-71 Ja '61. (MIRA 14:1)

1. Iz kafedry obshchey khirurgii pediatricheskogo fakul'teta (zav. - prof. G.P. Zaytsev) i TSentral'noy nauchno-issledovatel'skoy laboratorii (zav. - kand.med.nauk E.M. Kogan) II Moskovskogo meditsinskogo instituta imeni N.I. Pirogova i 4-y Gorodskoy klinicheskoy bol'nitsy.
(ADRENALINE) (CARDIOVASCULAR SYSTEM—DISEASES)

ZAYTSEV, G.P., prof.; KAZANTSEV, F.N.

USSR

Sympathico-adrenal system in operations under different types of anesthesia. Nov.khir.arkh. no.1:34-46 '62. (MIRA 15:8)

1. Kafedra obshchey khirurgii (zav. - prof. G.P. Zaytsev) pediatricheskogo fakul'teta i TSentral'naya nauchno-issledovatel'skay aptechnaya laboratoriya.
(NERVOUS SYSTEM, SYMPATHETIC) (ADRENAL GLANDS)
(ANESTHESIA)

STARTSEV, I.V.; KAZANTSEV, F.N.

Morphological changes in the animals and functional disorders in the sympathoadrenal system following gastric resection. Sov. med. 25 no.2:63-70 F '62. (MIRA 15:3)

1. Iz kliniki obshchey khirurgii (zav. - zasluzhennyy deyatel' nauki prof. G.P. Zaytsev) pediatricheskogo fakul'teta II Moskovskogo meditsinskogo instituta imeni N.I. Pirogova.
(STOMACH—SURGERY) (ADRENAL GLANDS—DISEASES)

KAZANTSEV, F. N.

Clinical use of noradrenaline in anesthesiology. Vest. khir. no.2: 116-120 '62. (MIRA 15:2)

1. Iz kliniki obshchey khirurgii (zav. - prof. G. P. Zaytsev) pediatricheskogo fakul'teta 2-go Moskovskogo meditsinskogo instituta im. N. I. Pirogova.

(ARTERENOL) (ANESTHESIOLOGY)

KAZANTSEV, F.N. (Kazan')

Problems of anesthesiology at the Second All-Union Conference of Surgeons, Traumatologists and Anesthesiologists; December 20-25, 1961 in Baku. Kaz.med.zhur. no.3:94-95 My-Je '62. (MIRA 15:9)
(ANESTHESIOLOGY--CONGRESSES)

STARTSEV, I.V.; SHALEVICH, M.A.; KAZANTSEV, F.N.

Paraganglioma. Vest.khir. no.6:98-100 '62. (MIRA 15:11)

1. Iz kliniki obshchey khirurgii (dir. - prof. G.P. Zaytsev) 2-go Moskovskogo meditsinskogo instituta i patologoanatomicheskogo otdeleniya (zav. - prof. Ya.L. Rapoport) 4-y gorodskoy klinicheskoy bol'nitsy.

(CHROMAFFIN SYSTEM--TUMORS)

KAZANTSEV, F.K.

Use of noradrenaline in massive internal hemorrhages. Akush. i gin. no.2:47-52'63. (MIRA 16:10)

1. Iz kliniki obshchey khirurgii (zav. - zasluzhennyy deyatel' nauki - prof G.P. Zaytsev) i TSentral'noy nauchno-issledovatel'skoy laboratorii (zav. - dotsent E.M.Kogan) pediatricheskogo fakul'teta II Moskovskogo meditsinskogo instituta imeni N.I.Pirogova.
(NORADRENALINE) (HEMORRHAGE)

KAZANTSEV, F.N.; KHOVANSKAYA, M.G.

Some indicators of changes in the sympathetic-adrenal system during experimental surgery under intratracheal ether-oxygen and potentialized anesthesia. Eksper. khir. i anest. 8 no.3:89-92 My-Je '63 (MIRA 17:1)

1. Iz Moskovskoy kliniki obshchey khirurgii (zav. - prof. G.P. Zaytsev) pediatricheskogo fakul'teta i TSentral'noy nauchno-issledovatel'skoy laboratorii (zav. - dotsent E.M.Kogan) II Moskovskogo meditsinskogo instituta.

KAZANTSEV, P.N.

Changes in the sympathi[illegible] system [illegible] use of neuroplegics. Sov. med. [illegible] no.11:[illegible] [illegible] [illegible]

1. Iz kafedry obshchey khirurgii (zav. - zasluzhennyy deyatel' nauki prof. G.I. Zaytsev) pediatricheskogo fakul'teta i TSentral'noy nauchno-issledovatel'skoy laboratorii (zav. - kand. med. nauk E.M. Kogan) II Moskovskogo meditsinskogo instituta imeni Pirogova.

KAZANTSEV, F.N., kand.med.nauk; NAKHROVA, Z.V.

External respiration in scoliosis. Ortop., travm. i protez. 25 no.5:33-36 My '64. (MIRA 18:4)

1. Iz anesteziologicheskogo otdeleniya (rukovoditel' - F.N. Kazantsev) Kazanskogo instituta travmatologii i ortopedii (dir. - starshiy nauchnyy sotrudnik U.Ya.Bogdanovich). Adres avtorov: Kazan' 15, ul. M.Gor'kogo, d.3, Institut travmatologii i ortopedii.

KAYANTSEV, F.R.

Content of catechol amines in the blood during inhalation anesthesia. Vest. khir. 92 no.6:64-68 Je '64. (MIRA 18:5)

1. Iz kliniki obshchey khirurgii (zav. - prof. G.P. Zaytsev) pediatricheskogo fakul'teta i tsentral'noy nauchno-issledovatel'skoy laboratorii (zav. - dotsent E.M. Kogan) 2-go Moskovskogo meditsinskogo instituta imeni Pirogova (rektor - dotsent M.G. Sirotkina). Adres avtora: Moskva, Pavlovskaya ulitsa, 25, 4-ya gorodskaya bol'nitsa, klinika obshchey khirurgii pediatricheskogo fakul'teta.

[illegible], [illegible], kand. med. nauk (Kazan', [illegible]); PODOL'[illegible], [illegible]; [illegible]

Anesthesia in surgery for scoliosis. Ortop., travm. i protez. 26 no.2:70-71 F '65. (MIRA 18:5)

1. Iz Kazanskogo instituta travmatologii i ortopedii (dir. - starshiy nauchnyy sotrudnik U.Ya. Bogdanovich).

KAZANTSEV, F.N.

Change in the concentration of catechol amines in the venous blood of patients following surgery under spinal anesthesia. Sov.med. 28 no.12:101-106 D '65.

(MIRA 18:12)

1. Klinika obshchey khirurgii pediatricheskogo fakul'teta (zav. - prof. G.P.Zaytsev) i TSentral'naya nauchno-issledovatel'skaya laboratoriya (zav. - dotsent E.M.Kogan) II Moskovskogo meditsinskogo instituta imeni N.I.Pirogova i Kazanskiy nauchno-issledovatel'skiy institut travmatologii i ortopedii (direktor - starshiy nauchnyy sotrudnik U.Ya. Bogdanovich).

KAZANTSEV, F.S., insh.

Circuits for the switching on of fluorescent lamps in illuminating devices. Svetotekhnika 5 no.11:16-20 N '59.
(MIRA 13:2)

1. Chelyabinskiy institut mekhanizatsii i elektrifikatsii sel'skogo khozyaystva.
(Fluorescent lighting)

KAZANTSEV, F.S., inzh.

Questions on the operation of a fluorescent lamp with an active ballast. Svetotekhnika 6 no.2:15-19 F '60. (MIRA 13:5)

1. Chelyabinskiy institut mekhanizatsii i elektrifikatsii sel'skogo khozyaystva.
(Fluorescent lamps)

KAZANTSEV, F.S., inzh.

Operation of fluorescent lamps with reduced ballast resistors. Svetotekhnika 6 no. 12:3-7 D '60. (MIRA 14:1)

1. Chelyabinskiy institut mekhanizatsii i elektrifikatsii sel'skogo khozyaystva.

(Fluorescent lamsp)

KAZANTSEV, F. S.

Cand Tech Sci - (diss) "Use of combination illumination in raising of vegetable seedlings." Moscow, 1961. 21 pp with diagrams; (Moscow Order of Lenin Agricultural Academy imeni K. I. Timiryazev); 180 copies; price not given; list of author's works on p 21 (10 entries); (KL, 7-61 sup, 237)

ACC NR: AR6029420 SOURCE CODE: UR/0196/66/000/005/V017/V017

AUTHOR: Kazantsev, F. S.; Golov, Yu. F.

TITLE: Operation of high-pressure gas-discharge lamps in circuits containing ballast resistors

SOURCE: Ref. zh. Elektrotekhnika i energetika, Abs. 5V89

REF SOURCE: Uch. zap. Mordovsk. un-t, vyp. 30, 1965, 46-56

TOPIC TAGS: high pressure, ~~lamp~~ gas discharge, ~~lamp~~ electric lamp, resistor

ABSTRACT: Operating conditions of a PRK-2 lamp working with a resistive ballast (a PZh-110 x 500 incandescent lamp or a wire rheostat) and with an inductive ballast were experimentally investigated at a supply-voltage varying within 180--240 v. These conclusions are reported: (1) The gas-discharge lamp and its circuit parameters substantially depend on the voltage waveshape available; with a trapezoid shape, the current gaps drop to one-half and lower, which ensures much better parameters of both the lamp and the circuit (p. f. = 0.88; restarting voltage is reduced by 20%; the amplitude coefficient of the discharge current is lower than that with the inductive ballast); this voltage waveshape occurs when the lamp is connected to a 3-wire system without neutral; (2) In a no-neutral circuit, stable operation of the PRK-2 lamp with a small resistive ballast causing a 15--20% power loss is possible; (3) The ballast resistor should have an irregularly rising characteristic with a high temperature coefficient. Six figures. Four tables. Bibliography of 3 titles. I. Tikhomirov
[Translation of abstract]

Card 1/1 SUB CODE: 09 UDC: 621.327.534.2.032.4

ARSYUTKIN, N.V.; DANILENKO, S.P., Prinimali uchastiye; CHERNIY, B.P.; KAZANTSEV, G.I.; KARASEV, N.N.; VOROB'YEV, G.P.

Automatic weighing of Dinas brick material. Ogneupory 25 no.11:497-499 '60. (MIRA 13:12)

1. Pervoural'skiy dinasovyy zavod.
(Firebrick) (Weighing machines)

S/182/62/000/010/004/004
D040/D113

AUTHORS: Matsegora, N.T., and Kazantsev, G.I.

TITLE: Large bottoms stamped in a floating-punch die

PERIODICAL: Kuznechno-shtampovochnoye proizvodstvo, no. 10, 1962, 44

TEXT: The described die set designed by the authors permits stamping spherical steel ladle bottoms from single solid steel blanks (5300 mm in diam and 42 mm thick) in a single stroke of a 15,000 ton hydraulic press. Using this set, the sticking of ready stampings to the punch, as used to happen in stamping bottoms from billets welded together from 6 stamped edge sections and a spherical center portion, is eliminated. The new die set has an upward-moving bottom half, and the punch consists of a 200 mm high cylindrical portion with a floating ring. The bottom die half moves up and forms in sequence the spherical portion, the radius and then the cylindrical edge of the bottom. On moving upwards, the bottom die half presses against the floating ring and carries the latter upwards with it. At this moment, the ready stamping drops on the bottom plate of the press. The die set is illustrated and the stamping process described in detail. There are 3 figures.

Card 1/1

MATSEGORA, N.T.; KAZANTSEV, G.I.

Stamping large-size end plates in dies with a floating punch. Kuz.-shtam.proizv. 4 no.10:44 O '62. (MIRA 15:12)
(Sheet-metal work)

SERGEYEV, M.P., doktor tekhn. nauk; KAZANTSEV, G.M., inzh.; YANOVSKIY, F.V., inzh.; YAGODOV, O.P., inzh.; YARKIN, A.A., inzh.

Investigating the operating tension of the carrying system of the S-1000GP tractor with the D-493 bulldozer. Stroi. i dor. mash. 10 no.9:18-20 S '65. (MIRA 18:10)

L 48959-65 EPA(s)-2/EWT(m)/EPF(c)/EWA(d)/EWP(t)/E...

TOPIC TAGS: molybdenum, chloride, alkali metal, diffusion coeff...

ABSTRACT: The diffusion of molybdenum in dilute solutions of its trichloride in fused chlorides of alkali metals was studied. The ... these ... exceed ... g-equiv/cm³. Therefore the ... ions was significant only with ... salt ...

Card .

L 48969-65
ACCESSION NR: AP5007749

of lithium, potassium, and cesium and also eutectic LiCl-KCl. The diffusion coefficient of trivalent molybdenum was calculated according to the equation

$$D = 1.37 \cdot 10^{-6} \left(\frac{MI}{3\alpha\rho S}\right)^2, \text{ cm}^2/\text{sec}$$

where α is the concentration of molybdenum in weight %; M is the molecular weight; I is the strength of current in amperes; S is the [illegible] of the activation energy [illegible] cation radii of the salt solvents [illegible] ratio of the fusion to another [illegible]

ASSOCIATION: Ural'skiy politekhnicheskiy institut imeni S. M. [illegible] (Ural Polytechnical Institute)

SUBMITTED: 15Sep64 ENCL: 01

SUB CODE: GC, IC NR REF SOV: 013 OTHER: 003

Card 2/3

L 47969-65

ACCESSION NR: AP5007749

ENCLOSURE

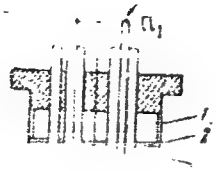
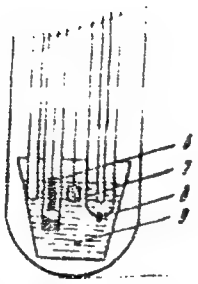


Fig. 1. Cell for measurements



Card 3/3

MICHKOV, I.F.; RASPOPIN, S.P.; KAZANTSEV, G.N.; [illegible], V.A.

Equipment for the automatic measurement of electrode polarization during the electrolysis of fused halides. Izv. vys. ucheb. zav.; tsvet. met. 7 no.6:136-139 '64. (MIRA 18:3)

1. Ural'skiy politekhnicheskiy institut.

MASHANSKIY, F.I.; KAZANTSEVA, G.S.

Method based upon biological principles for the transplantation of nerve trunks in extensive defects of them. Vop.psikh.i nevr. nevr. no.7:447-451 '61. (MIRA 15:8)
(NERVES--TRANSPLANTATION)

ASTAF'IEV, K.V.; KAZANTSEV, G.V.; TSIBUL'SKIY, K.I.; SHCHERBOV, D.P.; SHMANENKOV, I.V., redaktor; SERONYEVA, N.A.; BORISOV, A.S., tekhnicheskiy redaktor

[Team and continuous work methods in chemical laboratories] Brigadno-potochnyi metod raboty v khimicheskikh laboratoriiakh. Trudy lab.geol.upr. no.2:3-47 '52. (MLRA 7:11)
(Chemical laboratories)

SHAYLIKOV, A.S.; KAZANTSEV, G.V.; PROSKURIN, N.V.; RUSANOV, A.K., redaktor; STEPANOVA, L.S., redaktor; POPOV, N.D., tekhnicheskiy redaktor.

[Work practices in the spectrum analysis laboratory of the Geological Administration] Opyt raboty spektral'noi laboratorii geologicheskogo upravlenii. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po geologii i okhrane nedr, 1954. 1954. 26 p. (Trudy laboratorii geologicheskikh upravlenii, trestov, ekspeditsii i partii, no.5) (MLRA 10:4)
(Spectrum analysis)
(Chemical laboratories)

DRYAGINA, T.V.; KAZARINOV, G.Ye.

Effect of ionizing radiations on the tubers and seeds of gladioli. Nauch. dokl. vys. shkoly; biol. nauki no.1:91-94 '65.

(MIRA 18:2)

1. Rekomendovana kafedroy genetiki i selektsii Moskovskogo gosudarstvennogo universiteta.

ANNINSKIY, L.; LIKHAREV, B.; SOLODAR', TS.; KAZANTSEV, I., red.; ZHDANOVA, G., tekhn.red.

[Altai reporting; "Literaturnaia gazeta" in the virgin land, August-September, 1959] Altaiskii reportazh; "Literaturnaia gazeta" na tseline, avgust-sentiabr' 1959 g. Barnaul, Altaiskoe knizhnoe izd-vo, 1960. 197 p. (MIRA 14:4)
(Altai Territory--Description and travel)

KHUDYAKOV, Anatoliy Yakovlevich; KAZANTSEV, I., red.; ZHDANOVA, G., tekhn. red.

[Work and wages in Soviet trade] Trud i zarabotnaia plata v sovetskoi torgovle. Barnaul, Altaiskoe knizhnoeizd-vo, 1960. 37 p.
(MIRA 14:11)

(Wages--Retail trade)

NEYMARK, I.I., prof., red.; KAZANTSEV, I., red.; ZHDANOVA, G., tekhn. red.

[Problems in thoracic and abdominal surgery; collection of works of the Altai Territory Surgical Society] Voprosy grudnoi i briushnoi khirurgii; sbornik rabot Altaiskogo kraevogo nauchnogo khirurgicheskogo obshchestva. Pod red. I.I.Neimarka. Barnaul, Altaiskoe knizhnoe izd-vo, 1961. 455 p. (MIRA 14:12)

1. Altayskiy kray. Otdel zdravookhraneniya.
(CHEST—SURGERY) (ABDOMEN—SURGERY)

KAZANTSEV, I., gvardii podpolkovnik, voyennyy letchik pervogo klassa

Landing on another airport. Av. i kosm. 46 no.12:69-70 D '63. (MIRA 17:1)

TYUKANOV, Konstantin Ivanovich; KAZANTSEV, I., red.; ZHDANOVA, O., tekhn.red.

[Retail trade] Roznichnaia torgovlia. Barnaul, Altaiskoe knizhnoe izd-vo, 1960. 31 p. (MIRA 14:12)
(Altai Territory--Retail trade)

MAVCHENKO, D.K.; KAZANTSEV, I., red.; ZHDANOVA, O., tekhn.red.

[Wholesale trade in the U.S.S.R.] Optovaia torgovlia v SSSR. Barnaul, Altaiskoe knizhnoe izd-vo, 1960. 32 p. (MIRA 14:12)

(Wholesale trade)

KAZANTSEV, I.A.; MANSUROV, G.Yu.

Working conditions and morbidity among railway engine crews. Gig. i san. no.12:42-43 D '54. (MLRA 8:2)

1. Iz laboratorii gigiyeny truda i promyshlennoy sanitarii dorozhnoy sanitarno-epidemiologicheskoy stantsii Kazanskoy zheleznoy dorogi.
(INDUSTRIAL HYGIENE
railway engineers working cond. & morbidity in Russia)
(OCCUPATIONAL DISEASES
railway engineers in Russia, relation to working cond.)

KAZANTSEV I.

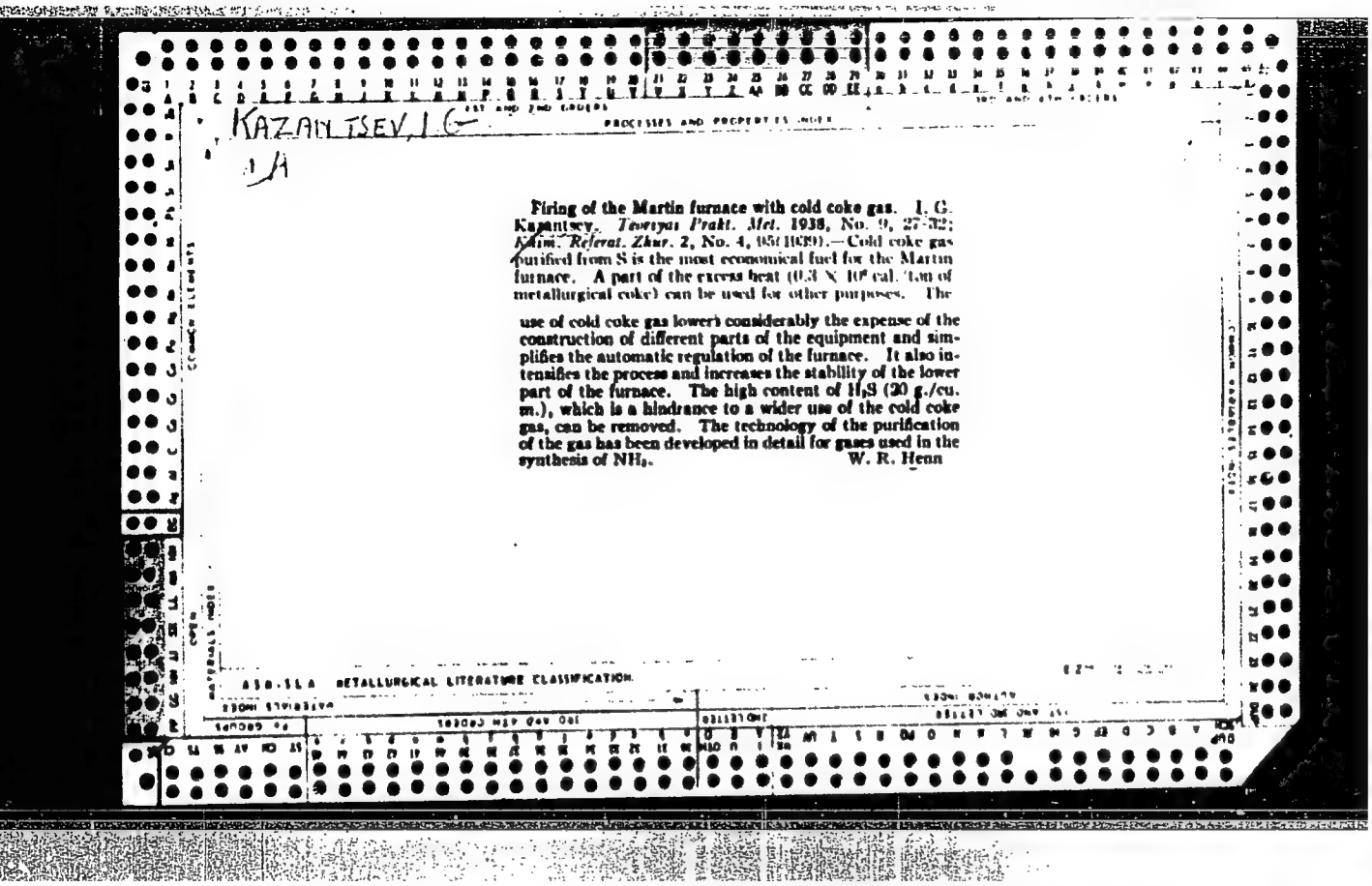
PROCESSES AND PROPERTIES INDEX

2/

Two years' experience with DMI atomizers on the Martin furnaces at the Komintern plant. I. Kazantsev. *Stal* 8, No. 10, 17-22(1938). The operation of low high pressure atomizers, originated by N. Dobrokhotov and by K., is described. These atomizers have 2 aerodynamic tubes connected in series so that the flame can be carefully regulated, at the output of one atomizer of 2500 kg mazut per hr. The atomizers give a steady direction to the flame and a high speed of burning. In changing from one atomizer to another it is recommended to det. the dimensions of the atomizing nozzles. The calcn. should be based on the energy supplied to the atomizer at the rate of 15,000-20,000 kg. vapor or 10,000 to 12,000 kg. air for every kg. mazut.

S. Machelson

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

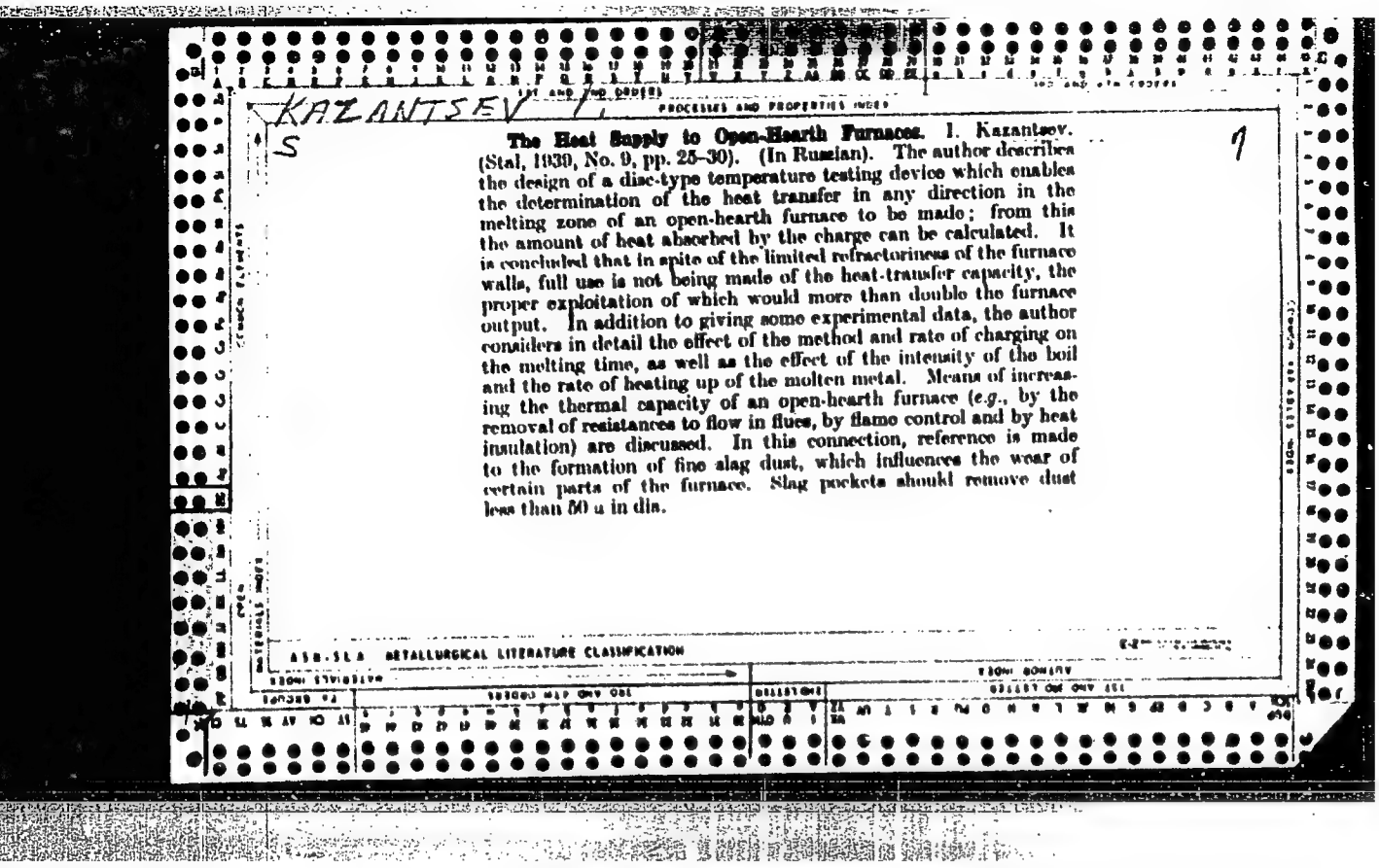


KAZANTSEV, I. G.

1/4

Firing of the Martin furnace with cold coke gas. I. G. Kazantsev. *Tsvetnyi Prakt. Met.* 1938, No. 9, 27–32; *Khim. Referat. Zhur.* 2, No. 4, 95(1939).—Cold coke gas purified from S is the most economical fuel for the Martin furnace. A part of the excess heat (0.3×10^6 cal./ton of metallurgical coke) can be used for other purposes. The use of cold coke gas lowers considerably the expense of the construction of different parts of the equipment and simplifies the automatic regulation of the furnace. It also intensifies the process and increases the stability of the lower part of the furnace. The high content of H_2S (20 g./cu. m.), which is a hindrance to a wider use of the cold coke gas, can be removed. The technology of the purification of the gas has been developed in detail for gases used in the synthesis of NH_3. W. R. Henn

A38-51A METALLURGICAL LITERATURE CLASSIFICATION



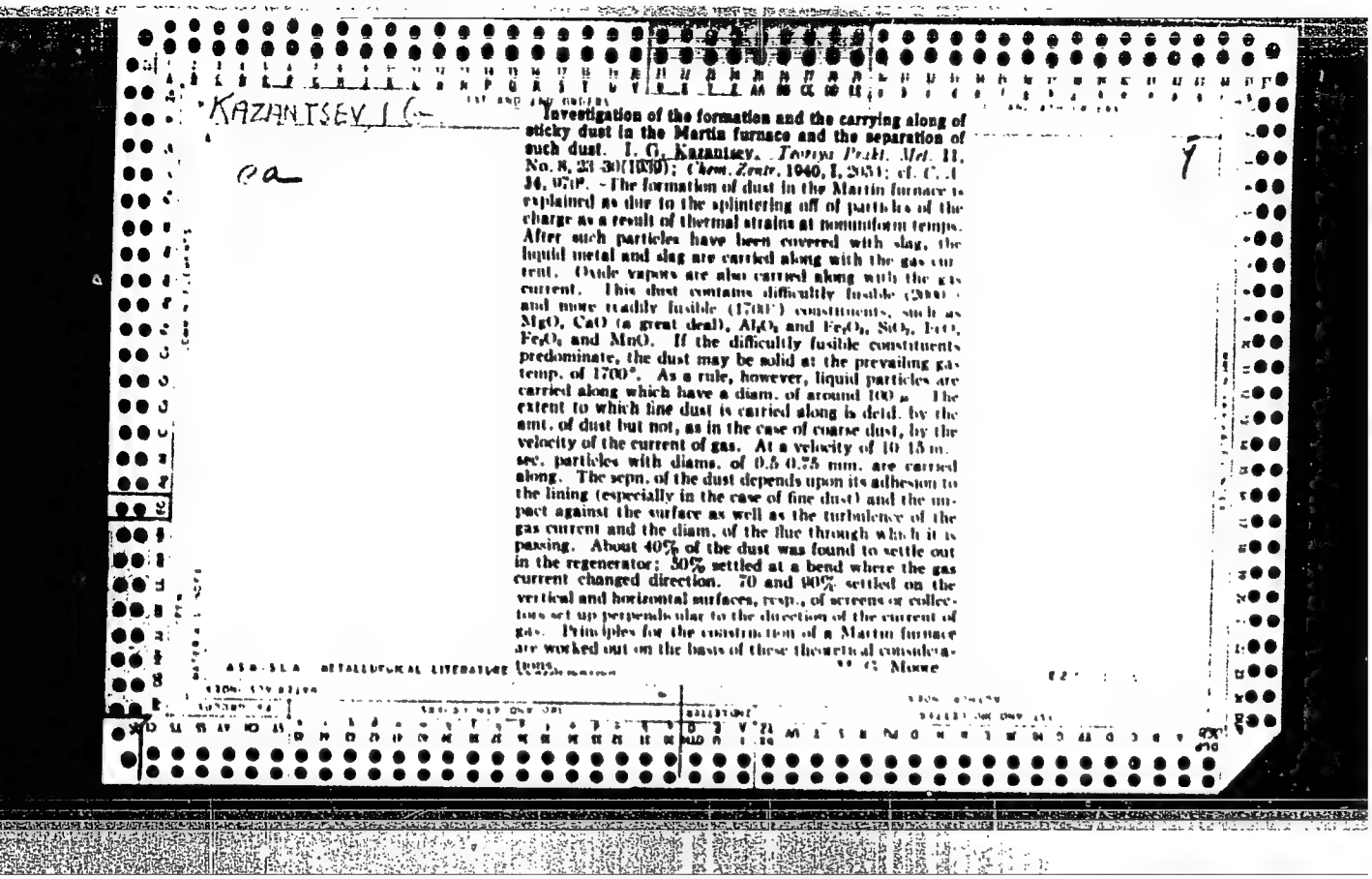
KAZANTSEV I.

S

1

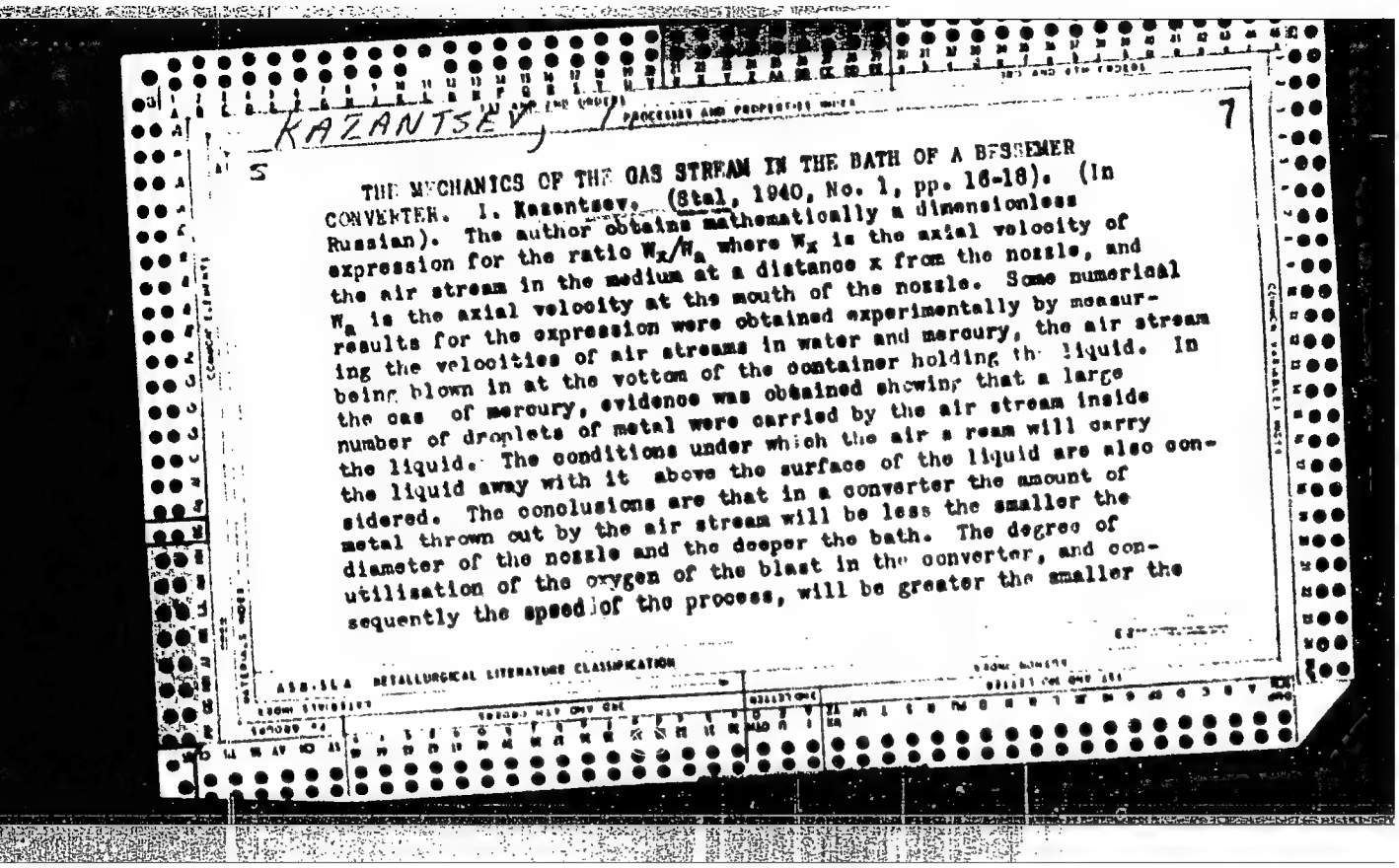
The Heat Supply to Open-Hearth Furnaces. I. Kazantsev. (Stal, 1939, No. 9, pp. 25–30). (In Russian). The author describes the design of a disc-type temperature testing device which enables the determination of the heat transfer in any direction in the melting zone of an open-hearth furnace to be made; from this the amount of heat absorbed by the charge can be calculated. It is concluded that in spite of the limited refractoriness of the furnace walls, full use is not being made of the heat-transfer capacity, the proper exploitation of which would more than double the furnace output. In addition to giving some experimental data, the author considers in detail the effect of the method and rate of charging on the melting time, as well as the effect of the intensity of the boil and the rate of heating up of the molten metal. Means of increasing the thermal capacity of an open-hearth furnace (*e.g.*, by the removal of resistances to flow in flues, by flame control and by heat insulation) are discussed. In this connection, reference is made to the formation of fine slag dust, which influences the wear of certain parts of the furnace. Slag pockets should remove dust less than 50 μ in dia.

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION



KAZANTSEV I G

Investigation of the formation and the carrying along of sticky dust in the Martin furnace and the separation of such dust. I. G. Kazantsev. *Tsvetn. Metall. Met.* 11, No. 8, 23-30(1939); *Chem. Zentr.* 1940, I, 2051; cf. C. 1936, 970. - The formation of dust in the Martin furnace is explained as due to the splintering off of particles of the charge as a result of thermal strains at nonuniform temps. After such particles have been covered with slag, the liquid metal and slag are carried along with the gas current. Oxide vapors are also carried along with the gas current. This dust contains difficultly fusible (2000° and more readily fusible (1700°) constituents, such as MgO, CaO (a great deal), Al_2O_3 and Fe_2O_3, SiO_2, FeO, Fe_2O_3 and MnO. If the difficultly fusible constituents predominate, the dust may be solid at the prevailing gas temp. of 1700°. As a rule, however, liquid particles are carried along which have a diam. of around 100 μ. The extent to which fine dust is carried along is detd. by the amt. of dust but not, as in the case of coarse dust, by the velocity of the current of gas. At a velocity of 10-15 m./sec. particles with diams. of 0.5-0.75 mm. are carried along. The sepn. of the dust depends upon its adhesion to the lining (especially in the case of fine dust) and the impact against the surface as well as the turbulence of the gas current and the diam. of the flue through which it is passing. About 40% of the dust was found to settle out in the regenerator; 50% settled at a bend where the gas current changed direction. 70 and 90% settled on the vertical and horizontal surfaces, resp., of screens or collectors set up perpendicular to the direction of the current of gas. Principles for the construction of a Martin furnace are worked out on the basis of these theoretical considerations.



KAZANTSEV, I.

5

7

THE MECHANICS OF THE GAS STREAM IN THE BATH OF A BESSEMER CONVERTER. I. Kazantsev. (Stal, 1940, No. 1, pp. 16-18). (In Russian). The author obtains mathematically a dimensionless expression for the ratio W_x/W_a where W_x is the axial velocity of the air stream in the medium at a distance x from the nozzle, and W_a is the axial velocity at the mouth of the nozzle. Some numerical results for the expression were obtained experimentally by measuring the velocities of air streams in water and mercury, the air stream being blown in at the vottom of the container holding the liquid. In the case of mercury, evidence was obtained showing that a large number of droplets of metal were carried by the air stream inside the liquid. The conditions under which the air stream will carry the liquid away with it above the surface of the liquid are also considered. The conclusions are that in a converter the amount of metal thrown out by the air stream will be less the smaller the diameter of the nozzle and the deeper the bath. The degree of utilisation of the oxygen of the blast in the converter, and consequently the speed of the process, will be greater the smaller the

value of W_x/W_a at the surface of the bath. It is suggested that a suitable value of the ratio of the depth of the metal to the diameter of the nozzles would be 50-60 instead of the value of 25-30 used at present. This would permit the speed of the blast at the ends of the nozzles to be reduced from 300 to 250 m. per sec. without impairing the efficiency of the reaction of the oxygen with the metal.

SOV/137-58-9-18587

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 9, p 59 (USSR)

AUTHORS: Kazantsev, I.G., Kuznetsov, A.F.

TITLE: Open-hearth Furnaces of the "Azovstal'" Plant Operate on a Coke Oven-gas Mixture With Refined Gases or Gases Contaminated With Sulfur (Rabota martenovskikh pechey zavoda "Azovstal'" na koksodomennoy smesi s neochishchennym i ochishchennym ot sery koksovym gazom)

PERIODICAL: Sb. nauchn. tr. Zhdanovsk. metallurg. in-t, 1957, Nr 4, pp 11-29

ABSTRACT: The authors examine the effect of S contained in cast iron and in the fuel material on the S content in the metal during smelting, as well as on the duration of the melting period. Graphs are shown which illustrate this relationship. It is pointed out that the S is introduced into the fuel by the coke gas (CG) which contains up to 20 g of S per cubic meter. Calculations are presented which take into account the fact that 50% of the S from the fuel are deposited in the checker work, a certain amount of the S from the fuel being oxidized to SO_2, and demonstrate that the gaseous phase of the open-hearth furnace

Card 1/2

Open-hearth Furnaces of the "Azovstal'" Plant (cont.)

contains 0.25% of SO_2 by volume if the furnace operates on sulfur-bearing coke-oven gas, and 0.12% if the furnace operates on a refined and preheated gas mixture. The refining of the CG is accomplished by the arsenic-soda method in special sulfur-collecting devices capable of reducing the S content of the CG from 20 to 3.5 g/m^3. A sulfur balance for smelting of steel in open-hearth furnaces of the "Azovstal'" plant is shown. It reveals that the S passes from slag into the gas at a rate of 0.12 kg/m^2 hr in the case of unrefined CG and 0.24 kg/m^2hr in the case of refined gas. The employment of the method of desulfurization of CG makes it possible to utilize slags with lower alkalinity for processing of cast iron containing up to 0.1% of S in open-hearth furnaces without impairing the quality of the process.

M.Kh.

1. Open hearth furnaces--Operation 2. Fuels--Performance 3. Sulfur--Effectiveness
4. Coal gas--Properties

Card 2/2

DANIKHELKA, A., doktor, inzh.; MIKHAYLOV, O.A., kand. tekhn. nauk; GONCHARENKO, N.I.; KLIMASENKO, L.S.; OYKS, G.N., prof., doktor tekhn. nauk; SEMENENKO, P.P.; MOROZOV, A.N., prof., doktor tekhn. nauk; GLINKOV, M.A., prof., doktor tekhn. nauk; KAZANTSEV, I.G., prof., doktor tekhn. nauk; KOCHO, V.S., prof., doktor tekhn. nauk; KNEKESH, Sh., kand. tekhn. nauk; MOROZENSKIY, L.I., kand. tekhn. nauk; GURSKIY, G.V.; SPERANSKIY, V.G.; NOVIK, L.M., kand. tekhn. nauk, starshiy nauchnyy sotrudnik; SHNEYEROV, Ya.A., kand. tekhn. nauk; PAPUSH, A.G., kand. tekhn. nauk; MAZOV, V.F.; SAMARIN, A.M.

Discussions. Biul. TSNIICHM no.18/19:17-35 '57. (MIRA 11:4)

1. Glavnyy staleplavil'shchik Ministerstva metallurgicheskoy promyshlennosti i rudnikov Chekhoslovatskoy respubliki (for Danikhelka). 2. Direktor TSentral'nogo instituta informatsii chernoy metallurgii (for Mikhaylov). 3. Direktor Ukrainskogo instituta metallov (for Goncharenko). 4. Glavnyy staleplavil'shchik Kuznetskogo metallurgicheskogo kombinata (for Klimasenko). 5. Zaveduyushchiy kafedroy metallurgii stali Moskovskogo instituta stali (for Oyks). 6. Zamestitel' glavnogo inzhenera zavoda im. Serova (for Semenenko). 7. Zaveduyushchiy kafedroy metallurgii stali Chelyabinskogo politekhnicheskogo instituta (for Morozov). 8. Zaveduyushchiy kafedroy metallurgicheskikh pechey Moskovskogo instituta stali (for Glinkov). 9. Zaveduyushchiy kafedroy metallurgii stali Zhdanovskogo metallurgicheskogo instituta (for Kazantsev). 10. Zaveduyushchiy kafedroy metallurgii stali Kiyevskogo politekhnicheskogo instituta (for Kocho).

(Continued on next card)

DANIKHELKA, A.--(continued) Card 2.

11. Nachal'nik tekhnicheskogo otdela Ministerstva chernoy metallurgii Vengerskoy Narodnoy Respubliki (for Kneksah). 12. Zamestitel' direktora Novotul'skogo metallurgicheskogo zavoda (for Guraskiy). 13. Nachal'nik tekhnicheskogo otdela zavoda "Dneprospetsstal'" (for Speranskiy). 14. Institut metallurgii im. Baykova AN SSSR (for Novik). 15. Nachal'nik staleplavil'noy laboratorii Ukrainskogo instituta metallov (for Shneyerov). 16. Nachal'nik laboratorii po nepreryvnoy razlivke stali Zhdanovskogo filiala TSentral'nogo nauchno-issledovatel'skogo instituta Ministerstva stroitel'noy promyshlennosti (for Papush). 17. Nachal'nik martenovskogo tsekha zavoda "Zaporozhstal'" (for Mazov). 18. Zamestitel' direktora Instituta metallurgii im. Baykova AN SSSR, chlen-korrespondent AN SSSR (for Samarin).

(Steel--Metallurgy)

SOV/133-58-8-7/30

AUTHORS: Leporskiy, V.V., Petrov, S.S. and Presnyakov, V.M., Engineers, Kazantsev, I.G., Professor

TITLE: Mass Production of Semi-killed Steel for Manufacturing Mine Supports (Massovoye proizvodstvo poluspokoynoy stali dlya shakhtnogo krepleniya)

PERIODICAL: Stal', 1958, Nr 8, pp 702 - 706 + 1 plate (USSR)

ABSTRACT: Experience gained in the large-scale production of semi-killed steel for rolling profiles for the manufacture of mine supports is discussed. For a long time, a killed steel, St5, was smelted for the purpose (GOST 380-50). In order to increase the yield of rolled products in 1955, the above steel was replaced by a semi-killed steel of the following composition: C 0.28-0.37%, Si - traces, Mn 0.70-1.10%, S $\leq$0.055, P $\leq$0.050. Smelting of the steel was carried out in 350-ton open-hearth furnaces with basic roofs fired with a mixture of coke-oven and blast-furnace gas. The proportion of hot metal 70-75%. Oxygen additions to flame and to the bath were used during smelting. The deoxidation of metal is done in the furnace with 3.5 - 4.0 t of blast-furnace ferromanganese so as to obtain 0.8-1.0% of manganese in the finished metal. Final deoxidation is done in the ladle with an average of

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20 g/t of aluminium. The total duration of the heat 11 - 13 hours. Changes in the composition of metal and slag in the course of the heat are shown in Figure 1. Steel is bottom-poured in 7-ton ingots. Rolling of ingots is carried out in the same way as for rimming steel. Crop heads do not exceed 5%. The influence of carbon and manganese content on the mechanical properties of steel was investigated by the statistical analysis of data for 518 heats. The results are shown in Table 2 and Figure 2. Conclusions: 1) the possibility of replacing St5 steel by semi-killed steel not containing silicon but about 1% of manganese was established. 2) Smelting and teeming of this steel is simple and similar to that of rimming steel. 3) The most economical method of deoxidation of the steel is by an addition of blast-furnace ferrosilicon to the furnace and partially into the ladle with an addition to the ladle of aluminium (30 g/t). Ferrosilicon is not used. 4) Heating and rolling conditions for the steel are the same as for rimming steel. 5) By replacing killed steel by the semi-killed steel, the coefficient of the consumption of metal decreased from 1.257 to 1.146,

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equivalent to the economy of 111 kg/t of ingots. 6) The quality of the surface of ingots, blooms and finished products from semi-killed steel is quite satisfactory. 7) Mechanical properties of mine supports correspond to requirements of standards for killed steel, St5 (GOST 380-50). There are 2 tables, 2 figures and 4 references, 2 of which are Soviet and 2 English.

ASSOCIATIONS: Zavod "Azovstal'" ("Azovstal" Works) and Zhdanovskiy metallurgicheskiy institut (Zhdanov Metallurgical Institute)

1. Steel--Production 2. Steel--Applications 3. Underground structures--Materials

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S/137/62/000/002/073/14
A006/A101

AUTHORS: Kazantsev, I. G., Privezentsev, I. Ya.

TITLE: Investigating the corrosion resistance of chromous and chrome-aluminum steels in the presence of hydrogen sulfide

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 2, 1962, 33, abstract 2I195 ("Sb. nauchn. tr. Zhdanovsk. metallurg. in-t", 1960, no. 5, 257 - 261)

TEXT: For operation under conditions of coke-chemical plants, Cr-steels, containing 7 - 12% Cr, are the most corrosion resistant.

T. Rumyantseva

[Abstracter's note: Complete translation]

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S/133/61/000/004/008/015
A054/A127

AUTHORS: Kazantsev, I. G., Professor; Lukashov, G. G., Engineer; Bul'skiy, M. T., Engineer; Tarasova, L. P., Engineer, and Sapelkin, N. F., Engineer

TITLE: The most important properties of arsenic containing MCT.3кп (MSt.3 kp) type rimming steel

PERIODICAL: Stal' no. 4, 1961, 346 - 350

TEXT: Steel beams, channels, hinges and sheets used in the building industry must come up to the following requirements of ГОСТ (GOST) 380-50: σ_B = 38 kg/sq mm; σ_S = 24 kg/sq mm; δ_{10} = 25%. Since 1954 products for the building industry have been manufactured in the "Azovstal'" plant of MSt.3kp rimming steel with an arsenic content of 0.13% produced from Kerch' ore. The mechanical properties of the arsenic-containing steel of Azovstal' were tested together with three heats of non-arsenic containing MSt.3kp steel processed in the Yenakiyeo plant from Krivoyrog ores. The composition of the heats is given in Table 1. From the test castings no. 30 channels, 2 meters in length were produced (from the top, medium and bottom part of

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the ingot). Samples were made from the steel channels to test the tensile strength, notch toughness as well as to carry out endurance and brittle fracture tests. The tensile strength values (Table 2) show that for a practically identical composition the arsenic-containing steel displays 2 - 4% higher values than arsenic-free steel, whereas both types have the same values for relative elongation. For notch toughness with Menazhe (Menager) type samples - 45 longitudinal and 45 transversal from each heat - the following average values were obtained:

Test-temperature, °C	+20	0	-20	-40	-60
As-containing					
longitudinal samples	14.0	10.8	8.6	3.7	0.30
transversal "	8.4	6.7	5.4	3.0	0.32
As-free					
longitudinal samples	12.3	9.4	5.8	0.80	0.30
transversal "	7.6	4.9	3.6	0.68	0.28

Thus, notch toughness is higher for arsenic containing steels at each temperature tested. For endurance tests special samples were made. Sheets 11.5 mm thick were cut from the no. 30 channels of both kinds of steel and

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polished on magnetic sheet to 10 mm ± 0.02 mm. Next arsenic containing and non-containing sheets were welded together (Fig. 1). In this way the two different steel types could be tested simultaneously and under exactly identical conditions. 288 welded samples were tested in all: 72 longitudinal samples, polished on 3 sides, 72 of the same kind, but polished on 4 sides, while from arsenic non-containing steel the same number of samples in the same assortment were investigated. It was found that under symmetrical oscillating bending load, with a stress in the external fibers of the material between 13.4 and 8.5 kg/sq mm (measured at every 0.7 kg/sq mm) most fractures occurred in non-arsenic samples (169 of 240 or 70%). The limit of endurance in arsenic-containing and non-containing steel samples established under symmetrical oscillating bending load with a number of cycles of 10^7, from 19 to 20 kg/sq mm decreases in the proximity of the welding seams with a bead, to 8.5 - 9.2 kg/sq mm. The tests proved that samples containing arsenic display a greater bending resistance than arsenic-free steels and are thus more suitable for welded building constructions than the latter. Tests on brittle fracturing of both types of steel were carried out at +20, -20 and -60°C on samples as given in Figure 4 and consisting of 50% As-containing and 50% As-free steel. 78% of the fractures occurred in non-arsenic

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steel samples. No brittle fracture could be observed in the proximity of the welding seam, in either kind of samples at low temperatures, proving that MSt.3kp steels are suitable for electrowelding. It was concluded that the MSt.3kp steel made of Kerchensk ore, with electrowelded seams and a 0.13% As content is superior to the same branch of steel not containing As, with regard to tensile strength, notch toughness, endurance and brittle fracture. There are 5 figures, 3 tables and 3 references: 2 Soviet-bloc and 1 non-Soviet-bloc.

ASSOCIATION: Zhdanovskiy metallurgicheskiy institut (Zhdanov Metallurgical Institute) and zavod "Azovstal'" (Azovstal' Plant).

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